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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,689	03/25/2004	Mark Larche	3652/2004	7876
29933	7590	10/10/2006	EXAMINER	
PALMER & DODGE, LLP KATHLEEN M. WILLIAMS 111 HUNTINGTON AVENUE BOSTON, MA 02199			ROONEY, NORA MAUREEN	
		ART UNIT	PAPER NUMBER	
			1644	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/809,689	LARCHE ET AL.	
	Examiner	Art Unit	
	Nora M. Rooney	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 August 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 1-29 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-7 and 12-13 drawn to a method of desensitizing a patient to a polypeptide allergen comprising administering a peptide derived from the allergen wherein restriction to an MHC Class II molecule can be demonstrated and the peptide is able to induce a late phase response in an individual with said MHC Class II molecule, classified in Class 514, subclass 2.
- II. Claims 8-11 and 13-14, drawn to a composition comprising a plurality of peptides derived from a polypeptide allergen wherein for at least one of the peptides in the composition restriction to an MHC Class II molecule can be demonstrated and the composition is able to induce a late phase response in an individual with said MHC Class II molecule; classified in Class 530, subclass 324.
- III. Claims 15-21, drawn to a method of selecting a peptide for use as an immunotherapeutic agent for desensitizing a patient to a polypeptide allergen capable of eliciting an allergic response in a patient with a particular MHC Class II molecule comprising selecting a candidate peptide, determining whether the candidate peptide demonstrates restriction to the said MHC Class II molecule and determining whether the candidate peptide is able to induce a late phase response in an individual who possess the said MHC Class II molecule; classified in Class 424, subclass 185.1.
- IV. Claims 22 and 24, drawn to a peptide selected by the method of selecting a peptide for use as an immunotherapeutic agent for desensitizing a patient to a

polypeptide allergen capable of eliciting an allergic response in a patient with a particular MHC Class II molecule comprising selecting a candidate peptide, determining whether the candidate peptide demonstrates restriction to the said MHC Class II molecule and determining whether the candidate peptide is able to induce a late phase response in an individual who possess the said MHC Class II molecule, classified in Class 530, subclass 324.

V. Claim 23, drawn to a database of peptides characterized according to their ability to bind an MHC Class II molecule and induce a late phase response in an individual possessing the said MHC Class II molecule, classified in Class 707, subclass 1.

VI. Claim 25, drawn to a method for selecting a peptide for use as an immunotherapeutic agent for desensitizing a patient to an allergen comprising the steps of tissue-typing the patient to determine MHC Class II type and selecting from a database of peptides, which are known to bind to particular MHC Class II molecules and induce a late phase response in an individual possessing such MHC Class II molecules, one or more molecules possessed by the patient, classified in Class 435, subclass 7.1.

VII. Claims 26-29, drawn to a method of determining an initial dose of an immunotherapeutic peptide for desensitizing a patient to a MHC Class II restricted polypeptide allergen that is able to induce a late phase response in an individual with said MHC Class II restricted molecule comprising determining the dose which is able to generate an observable late phase response in a given proportion of individuals who possess the said MHC molecule and in whom the peptide is able to induce a late phase response; and selecting a lower dose which is incapable of inducing an observable late phase response in substantially all individuals who possess the said MHC molecule and in whom the peptide is able to induce a late phase response , classified in Class 514, subclass 2.

2. Groups II, IV and V are different products. The peptide of Group IV is distinct from the composition of Group II comprising a plurality of peptides with respect to their structures, modes of action and physicochemical properties. The database of Group V is distinct from the peptide of Group IV and the composition of Group II with respect to structure and function. Therefore, each product is patentably distinct.
3. Groups I, III, VI and VII are different methods. The method of desensitizing a patient to a polypeptide allergen of Group I, the method of selecting a peptide for use as an immunotherapeutic agent for desensitizing a patient to a polypeptide allergen of Group IV, the method for selecting a peptide for use as an immunotherapeutic agent for desensitizing a patient to an allergen of Group VI and the method of determining an initial dose of an immunotherapeutic peptide for desensitizing a patient all differ each from each other with respect to ingredients, method steps, and endpoints; therefore, each method is patentably distinct.
4. Groups II and I are related as product and process of using. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the composition of Group II can be used for antibody generation or sequencing, in addition to the methods of desensitizing recited.
5. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct

method steps. Therefore restriction for examination purposes as indicated is proper. Further, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention.

Species Election

6. Irrespective of whichever group applicant may elect, applicant is further required under 35 U.S.C. 121 (1) to elect a single disclosed species to which claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.

A. If Group I is elected, applicant is required to elect:

a single disclosed species of Class II DR molecule as recited in Claims 3 and 4 (DR2, DR3, DR4 or DR7); and

a single disclosed species of Fel d I-derived peptide of SEQ ID NO 1, 2 or 3 as recited in Claim 6; and

a single MHC Class II restricted peptide of the Fel d I-derived peptide as described in Figure 9 of Claim 7.

The peptide species differ with respect to their structures, modes of action and physiochemical characteristics; therefore each species is patentably distinct.

B. If Group II is elected, applicant is required to elect:

a single disclosed species of Class II DR molecule as recited in Claim 9 (DR2, DR3, DR4 or DR7); and

a single disclosed species of polypeptide allergen (Fel d 1, Der p I, Der p II, Der fI or Der fII) as recited in Claim 13; and

a single disclosed species of Fel d I peptide of SEQ ID NO 1, 2 or 3 and/or a single MHC Class II restricted peptide of the Fel d I-derived peptide as described in Figure 9, as recited in claim 14.

The peptide species differ with respect to their structures, modes of action and physiochemical characteristics; therefore each species is patentably distinct.

C. If Group III is elected, applicant is required to elect:

a single disclosed species of polypeptide allergen (Fel d 1, Der p I, Der p II, Der fI or Der fII) of Claim 13 as recited in Claim 19; and

a single disclosed species of MHC molecule as recited in Claim 21 (HLA-DR, HLA-DP, HLA-DQ or subclasses thereof).

The peptide species differ with respect to their structures, modes of action and physiochemical characteristics; therefore each species is patentably distinct.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

7. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing

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of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

8. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nora M. Rooney whose telephone number is (571) 272-9937. The examiner can normally be reached Monday through Friday from 8:30 am to 5:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 26, 2006

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Maher M. Haddad
MAHER M. HADDAD
PATENT EXAMINER